a whole: they receive their biological meaning onlv through their relation to the whole, and the happening in a part considered in isolation from the life of the whole would lack all biological significance.[1]

He goes rather further than Ritter towards admitting the validity of teleological thinking: * The way of thinking which inquires after biological goals and significance is finalistic. Finalism is abruptly rejected bymanybiologists, but it must be admitted that at least as a heuristic principle it renders substantial services/ And he proceeds to reduce mechanistic explanation to the same somewhat doubtful status of a heuristic principle.

Alverdes stops to inquire what he means by wholeness and comes to the conclusion that we must recognize wholes of the five following classes: (i) inorganic, including all solid objects such as stones and crystals, as well as soap bubbles and other less stable physical *Gestdten*; whether he classes atoms and molecules here he does not say; (2) artificial wholes, including all machines and such objects as pieces of furniture, birds' nests, spiders* webs, cocoons; (3) organismic wholes, including all organisms; (4) intra-central or internal wholes, a class consisting of all meanings, such as the meaningful sentence in which the lesser wholes are regulated by and entirely subordinated to the whole of meaning; in the animals such internal wholes govern their activities, making of them significant wholes, such as the innate whole of activity which enables a bird to build its nest according to the pattern of the species; (5) over-individual wholes

such as animal and human societies of various degrees of organization.

He makes much of the physical *Gestalt* principle of Kohler, which is the only principle he invokes for the